

Claims

1. Procedure for the production of one in at least two subsequent castings molded object in a mold consisting of at least three mold parts, characterized by the fact that at least one middle part (3), placed between the preferably stationary front part (1) and the movable back part (2), after molding of the first part of the object (5) are turned at least one time preferably 180 degrees around an axis/axle (4), which preferably is at a right angle to the movement direction between the front part (1) of the mold and the back part (2), before the molding of the following part of the object (10).

2. Procedure for the production of one in at least two subsequent castings molded object as mentioned in claim 1, characterized by the fact that the material in the at least two molded parts of the object (5) and (10) either can be the same, e.g. the same thermoplastic material, or different materials such as two different thermoplastic materials, a thermoplastic material and an elastomer or a thermoplastic material and one for the sinter process decided material.

3. Procedure for the production of one in at least two subsequent castings molded object as mentioned in one or more of the previous claims, characterized by the fact that at least one of the turnable middle parts (3) is thermal insulated, e.g. with an insulating plate (11) between the two surfaces of the middle part (3), so that e.g. in the area of the mold on one side of the middle part (3) by the front part (1) a clearly higher temperature can be maintained than in the area at the back part (2). (This method can also be realized with a normal index mold/turn mold, where the one side of the turnable part is insulated in respect to the other side, as well as a combination of the two designs is possible).

4. Procedure as mentioned in claim 3, characterized by the fact that the with the insulating plate (11) equipped turnable middle part (3) are turned 180 degrees before the object/objects are removed from the first part of the mold to the second part of the mold, hereafter the middle part (3) is turned back again, whereby the objects e.g. can be transferred from a warm to a colder mold part without these two mold parts being in considerable contact with each other, while the object/objects are transferred to the new temperature area. Hereafter the middle part is turned 180 degrees again and the

molding continues. Using this procedure two considerable different materials e.g. can be molded together, such as a thermoplastic material and an elastomer, silicone etc.. (This method can also be realized by a normal index mold/turn mold).

5. Procedure/machine for the production of one in at least two subsequent castings molded object as mentioned in one or more of the previous claims, characterized by the fact that the front of the turnable middle part(s) (3) preferably are  
5 identical with the back, are a reflection hereof or that front and the opposite surface corresponds to each other in another way.

6. Procedure/machine for the production of one in at least two subsequent castings molded object as mentioned in one or more of the previous claims, characterized by the fact that if the middle part (3) contains objects to be removed, the  
5 ejectors ~in the middle part (3) can be designed as a direct connection between the to each other corresponding cavities and/or cores on respectively the front side and the back side of the middle part, and at the same time being provided with a special designed ball screw or a corresponding mechanism, which  
10 can cause the ejectors to serve their purpose and can be moved

in both directions, as it has no influence on the molding process that the ejector is moving away from the corresponding object. Consequently there will be no need for the relatively large space vertically, which is necessary by the normal  
15 ejector systems with ejector plate or similar mechanisms.

7. Procedure/machine for the production of one in at least two subsequent castings molded object as mentioned in one or more of the previous claims, characterized by the fact that the hold-down, that keeps the object in the mold at a following  
5 molding, is stronger than the hold-down of the previous molding, whereby it e.g. becomes possible to move the first part of the molded object (5) in the direction from the front part (1) of the mold via the middle part (3) to the back part (2) of the mold, so there is no need for ejectors before the  
10 object in its final molded position is ready for the ejection from the mold.

8. Procedure/machine for the production of one in at least two subsequent castings molded object as mentioned in one or more of the previous claims, characterized by the fact that the middle part (3) can be divided into several preferably vertical  
5 and similar sections (3' and 3"), which can turn around on

several preferably vertical axis (4' and 4"), whereby the radius of the turning axis for each section, and consequently the for the turning necessary maximum distance between the front part (1) and the back part (2) becomes considerable less  
10 than if the middle part (3) had been undivided on a single axis with the same total surface area/width.

9. Procedure/machine for the production of one in at least two subsequent castings molded object as mentioned in one or more of the previous claims, characterized by the fact that the mold opens in two steps preferable at first at the back part  
5 (2), whereby this part of the opening movement can be activated e.g. through a clinch-pull which can activate a core pull with e.g. a steep pitch in the front part, so that the object lies freely in the middle part (3) when the mold is totally open. This core pull can also be driven in another way than by  
10 clinch-pull.

10. Procedure/machine characterized by the fact, that you can mold metal in one part of the machine by means of a metal molding unit, and at the same time adding plastic an the metal in the other part of the machine in this way, e.g. aluminum at  
5 the front part (1) and a thermoplastic material at the back

part (2). (This can possibly also be used/work in a normal  
index mold/turn mold.)